

IN THE CLAIMS

1-17. (Canceled)

18. (New) A method for controlling data flow between a plurality of input devices and a plurality of output devices through a first or a second switch fabric interposed therebetween, wherein the first switch fabric is in an active mode and the second switch fabric is in a standby mode, said method comprising:

- (a) producing a control signal prior to causing the first switch fabric to assume the standby mode and the second switch fabric to assume the active mode;
- (b) in response to the control signal, terminating the transmission of data into the first switch fabric from the plurality of input devices;
- (c) in response to the control signal, starting a drain timer;
- (d) in response to the drain timer having timed out or receipt of a switch fabric empty signal from the first switch fabric, controlling the first switch fabric to assume the standby mode and the second switch fabric to assume the active mode;
- (e) subsequent to the drain timer having timed out or receipt of the switch fabric empty signal from the first switch fabric, starting a restart timer; and
- (f) in response to the restart timer having timed out, sending data from the plurality of input devices into the second switch fabric.

19. (New) The method of claim 18 wherein the drain timer has a time-out value selected such that under normal operating conditions any data in the first switch fabric will be routed out of the first switch fabric by the time the drain timer reaches the time-out value.

20. (New) The method of claim 18 wherein the reset timer is started in response to the drain timer having timed out or receipt of the switch fabric empty signal from the first switch fabric.

21. (New) The method of claim 18 further including the step of determining if the second switch fabric is operational prior to controlling the first switch fabric to assume the standby mode and the second switch fabric to assume the active mode.

22. (New) The method of claim 18 wherein the plurality of input devices and the plurality of output devices are associated with a packet data network.

23. (New) The method of claim 18 wherein the plurality of input devices and the plurality of output devices are associated with a telephony network and wherein the data represents voice signals.

24. (New) The method of claim 18 wherein the control signal is provided in response to a fault in the first switch fabric.

25. (New) A method for switching between a first and a second switch fabric in a data network, wherein a plurality of line cards are connected to both the first and the second switch fabrics for transmitting and receiving data traffic, wherein one of the first and the second switch fabrics is designated as an active switch fabric and the other of the first and second switch fabrics is designated as a standby switch fabric, said method comprising:

- (a) at each of the plurality of line cards, receiving a control signal;
- (b) in response to the control signal, terminating the transmission of data traffic from each one of the plurality of line cards into the active switch fabric;
- (c) in response to the control signal, at each one of the plurality of line cards, starting a drain timer;
- (d) sending a switch fabric empty signal from the active switch fabric to each of the line cards when the active switch fabric is empty;
- (e) at each one of the plurality of line cards, determining whether the drain timer has timed out or the switch fabric empty signal has been received;
- (f) in response to the drain timer having timed out or receipt of the switch fabric empty signal, redesignating the previously-designated standby switch fabric as the active switch fabric and the previously-designated active switch fabric as the standby switch fabric;
- (g) at each one of the plurality of line cards, subsequent to the drain timer having timed out or receipt of the switch fabric empty signal, starting a restart timer; and

(h) in response to the restart timer having timed out, sending and receiving data traffic between each of the plurality of line cards and the active switch fabric.

26. (New) A switch controller for controlling data flow between a first and a second switch fabric in a data network, wherein a plurality of line cards are connected to both the first and the second switch fabrics for transmitting and receiving data traffic, wherein one of the first and second switch fabrics is designated as an active switch fabric and the other of the first and second switch fabrics is designated as a standby switch fabric, and wherein said switch controller is responsive to a switch fabric empty signal indicating that there is no data traffic in the active switch fabric and further responsive to a switch fabric select signal identifying the active switch fabric, said switch controller comprising:

a first circuit module responsive to the switch fabric select signal for providing a first signal to the plurality of line cards, wherein said first signal instructs the plurality of line cards to terminate sending data traffic into the active switch fabric;

a drain timer started in response to the switch fabric select signal for providing a first time-out signal when said drain timer has timed out;

a logic device producing a second signal in response to at least one of said first time-out signal and said switch fabric empty signal; and

a restart timer started in response to said second signal for providing an enable signal when said restart timer has timed out, wherein said enable signal is input to the plurality of line cards for instructing the plurality of line cards to begin sending data traffic into the active switch fabric, and wherein the plurality of line cards are responsive to the switch fabric select signal for identifying the active switch fabric.

27. (New) The switch controller of claim 26 wherein the drain timer has a time-out value selected such that under normal operating conditions any data in the active switch fabric will be routed out of the active switch fabric by the time the drain timer reaches the time-out value.

28. (New) The switch controller of claim 26 wherein the restart timer has a time-out value selected such that each one of the plurality of line cards is enabled for sending and receiving data traffic at about the same time.

29. (New) A switching system for carrying data traffic between a plurality of input and output lines, said switching system comprising:

a first and a second switch fabric for switching data traffic between one or more of said plurality of input and output lines, wherein one of said first and said second switch fabrics is an active switch fabric as identified by a switch fabric select signal, and wherein the active switch fabric provides a switch fabric empty signal indicating there is no data traffic in the active switch fabric;

a plurality of line cards connected to one or more of the plurality of input and output lines and further connected to said first and said second switch fabrics for sending data traffic into and receiving data traffic from said first and said second switch fabrics;

a first circuit module responsive to the switch fabric select signal for providing a first signal to the plurality of line cards, instructing the plurality of line cards to terminate sending data traffic into the active switch fabric;

a drain timer started in response to the switch fabric select signal for providing a first time-out signal when said drain timer has timed out;

a logic device for producing a second signal in response to at least one of said first time-out signal and said switch fabric empty signal; and

a restart timer started in response to said second signal for providing an enable signal when said restart timer has timed out, wherein said enable signal is input to the plurality of line cards for instructing the plurality of line cards to begin sending data traffic into the active switch fabric, and wherein the plurality of line cards are responsive to the switch fabric select signal for identifying the active switch fabric.

30. (New) The switching system of claim 29 wherein the plurality of line cards is associated with a packet data network.

31. (New) The switching system of claim 29 wherein the plurality of line cards is associated with a telephony network and wherein the data traffic represents voice signals.

32. (New) The switching system of claim 29 wherein the first signal is provided in response to a fault in one of the first and second switch fabrics.